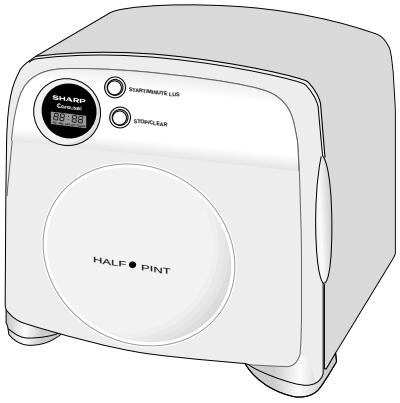
SHARP
SUPPLEMENTAL SERVICE MANUAL

S5012R120DPG/

MICROWAVE OVEN



MODEL R-120DG
R-120DP
R-120DSC

In the interest of user-safety the oven should be restored to its original condition and only parts identical to those specified should be used.

WARNING TO SERVICE PERSONNEL: Microwave ovens contain circuitry capable of producing very high voltage and current, contact with following parts may result in a severe, possibly fatal, electrical shock. (High Voltage Capacitor, High Voltage Power Transformer, Magnetron, High Voltage Rectifier Assembly, High Voltage Harness etc..)

This is a supplemental Service Manual for Models R-120DG, R-120DP, R-120DSC. This model is quite similar to base model R-120DW. Use this supplemental manual together with the Base Model Service Manual (Refer No. is S3007R120DPW/) for complete operation, service information, etc..

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

(a) Do not operate or allow the oven to be operated with the door open.
(b) Make the following safety checks on all ovens to be serviced before activating the magnetron or other microwave source, and make repairs as necessary: (1) interlock operation, (2) proper door closing, (3) seal and sealing surfaces (arcing, wear, and other damage), (4) damage to or loosening of hinges and latches, (5) evidence of dropping or abuse.
(c) Before turning on microwave power for any service test or inspection within the microwave generating compartments, check the magnetron, wave guide or transmission line, and cavity for proper alignment, integrity, and connections.
(d) Any defective or misadjusted components in the interlock, monitor, door seal, and microwave generation and transmission systems shall be repaired, replaced, or adjusted by procedures described in this manual before the oven is released to the owner.
(e) A microwave leakage check to verify compliance with the Federal Performance Standard should be performed on each oven prior to release to the owner.

BEFORE SERVICING

Before servicing an operative unit, perform a microwave emission check as per the Microwave Measurement Procedure outlined in this service manual.
If microwave emissions level is in excess of the specified limit, contact SHARP ELECTRONICS CORPORATION immediately @1-800-237-4277.

If the unit operates with the door open, service person should 1) tell the user not to operate the oven and 2) contact SHARP ELECTRONICS CORPORATION and The Food and Drug Administration's Center for Devices and Radiological Health immediately.

Service personnel should inform SHARP ELECTRONICS CORPORATION of any certified unit found with emissions in excess of 4mW/cm^2. The owner of the unit should be instructed not to use the unit until the oven has been brought into compliance.

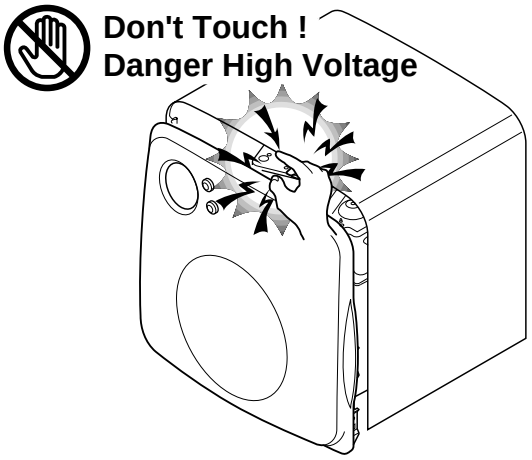
WARNING TO SERVICE PERSONNEL

Microwave ovens contain circuitry capable of producing very high voltage and current, contact with following parts may result in a severe, possibly fatal, electrical shock.

(Example)

High Voltage Capacitor, High Voltage Power Transformer, Magnetron, High Voltage Rectifier Assembly, High Voltage Harness etc..

Read the Service Manual carefully and follow all instructions.



Before Servicing

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.

WARNING: RISK OF ELECTRIC SHOCK. DISCHARGE THE HIGH-VOLTAGE CAPACITOR BEFORE SERVICING.

The high-voltage capacitor remains charged about 60 seconds after the oven has been switched off. Wait for 60 seconds and then short-circuit the connection of the high-voltage capacitor (that is the connecting lead of the high-voltage rectifier) against the chassis with the use of an insulated screwdriver.

Whenever troubleshooting is performed the power supply must be disconnected. It may, in some cases, be necessary to connect the power supply after the outer case has been removed, in this event,

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.
4. Disconnect the leads to the primary of the power transformer.
5. Ensure that the leads remain isolated from other components and oven chassis by using insulation tape.
6. After that procedure, reconnect the power supply cord.

When the testing is completed,

1. Disconnect the power supply cord, and then remove outer case.
2. Open the door and block it open.
3. Discharge high voltage capacitor.
4. Reconnect the leads to the primary of the power transformer.
5. Reinstall the outer case (cabinet).
6. Reconnect the power supply cord after the outer case is installed.
7. Run the oven and check all functions.

After repairing

1. Reconnect all leads removed from components during testing.
2. Reinstall the outer case (cabinet).
3. Reconnect the power supply cord after the outer case is installed.
4. Run the oven and check all functions.

Microwave ovens should not be run empty. To test for the presence of microwave energy within a cavity, place a cup of cold water on the oven turntable, close the door and set the power to HIGH and set the microwave timer for two (2) minutes. When the two minutes has elapsed (timer at zero) carefully check that the water is now hot. If the water remains cold carry out **Before Servicing** procedure and re-examine the connections to the component being tested.

When all service work is completed and the oven is fully assembled, the microwave power output should be checked and a microwave leakage test should be carried out.

SERVICE MANUAL

SHARP

MICROWAVE OVEN

R-120DG/ R-120DP/ R-120DSC

FOREWORD

This Manual has been prepared to provide Sharp Electronics Corp. Service Personnel with Operation and Service Information for the SHARP MICROWAVE OVEN, R-120DG, R-120DP, R-120DSC.

The models R-120DG, R-120DP and R-120DSC are quite similar to base model R-120DW (Refer No. is S3007R120DPW/).

It is recommended that service personnel carefully study the entire text of this manual and the base model's manual so that they will be qualified to render satisfactory customer service.

Check the interlock switches and the door seal carefully. Special attention should be given to avoid electrical shock and microwave radiation hazard.

WARNING

Never operate the oven until the following points are ensured.
(A) The door is tightly closed.
(B) The door brackets and hinges are not defective.
(C) The door packing is not damaged.
(D) The door is not deformed or warped.
(E) There is no other visible damage with the oven.

Servicing and repair work must be carried out only by trained service personnel.

DANGER

Certain initial parts are intentionally not grounded and present a risk of electrical shock only during servicing. Service personnel - Do not contact the following parts while the appliance is energized;
High Voltage Capacitor, Power Transformer, Magnetron, High Voltage Rectifier Assembly, High Voltage Harness;
If provided, Vent Hood, Fan assembly, Cooling Fan Motor.

All the parts marked "*" on parts list are used at voltages more than 250V.

Removal of the outer wrap gives access to voltage above 250V.

All the parts marked "Δ" on parts list may cause undue microwave exposure, by themselves, or when they are damaged, loosened or removed.

SHARP ELECTRONICS CORPORATION

**SHARP PLAZA, MAHWAH,
NEW JERSEY 07430-2135**

PRODUCT DESCRIPTION

SPECIFICATIONS

ITEM	DESCRIPTION
Power Requirements	120 Volts 60 Hertz Single phase, 3 wire grounded
Power Consumption	1030W / Approx. 9 Amperes
Power Output	600 W nominal of RF microwave energy (IEC Test procedure) Operating frequency 2450 MHz
Case Dimensions	Width 14-3/8" Height 14-1/8" Depth 14"
Cooking Cavity Dimensions (0.7 Cubic feet)	Width 11-3/4" Height 16" Depth 11-7/8"
Control Complement	Touch Control System Clock (1:00 - 12:59) Timer (0 - 99 minutes 45 seconds) POPCORN pad EXPRESS DEFROST pad COMPU COOK pad DOUBLE QUANTITY pad STOP/ CLEAR pad (STOP/CLEAR button) CLOCK/ TIMER pad 10 MINUTES pad 1 MINUTE pad 15 SECONDS pad START/ MINUTE PLUS button
Oven Cavity Light	Yes
Safety Standard	UL Listed. FCC Authorized DHHS Rules, CFR, Title 21, Chapter 1, Subchapter J

SCHEMATIC

NOTE: CONDITION OF OVEN

1. DOOR CLOSED
2. CLOCK APPEARS ON DISPLAY

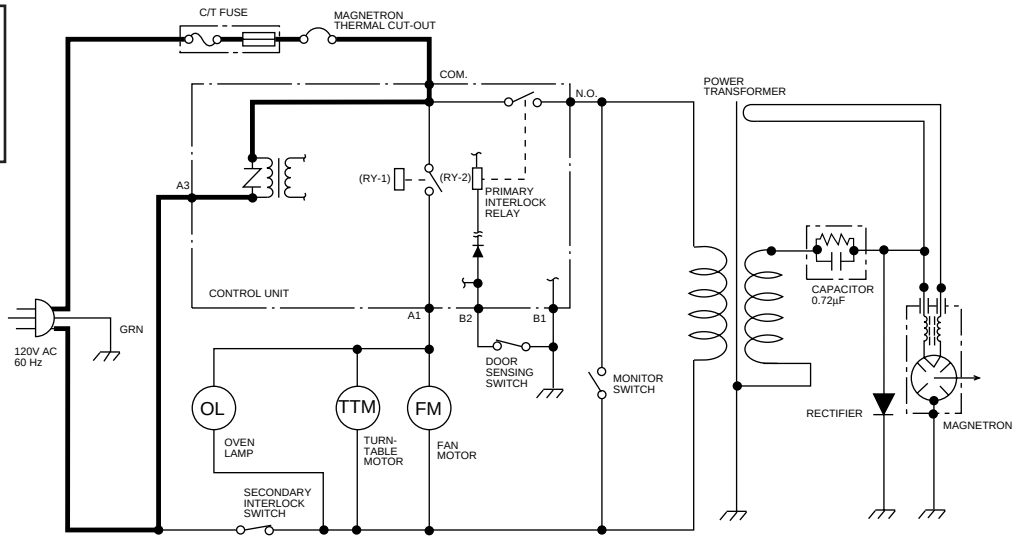


Figure O-1. Oven Schematic-Off Condition

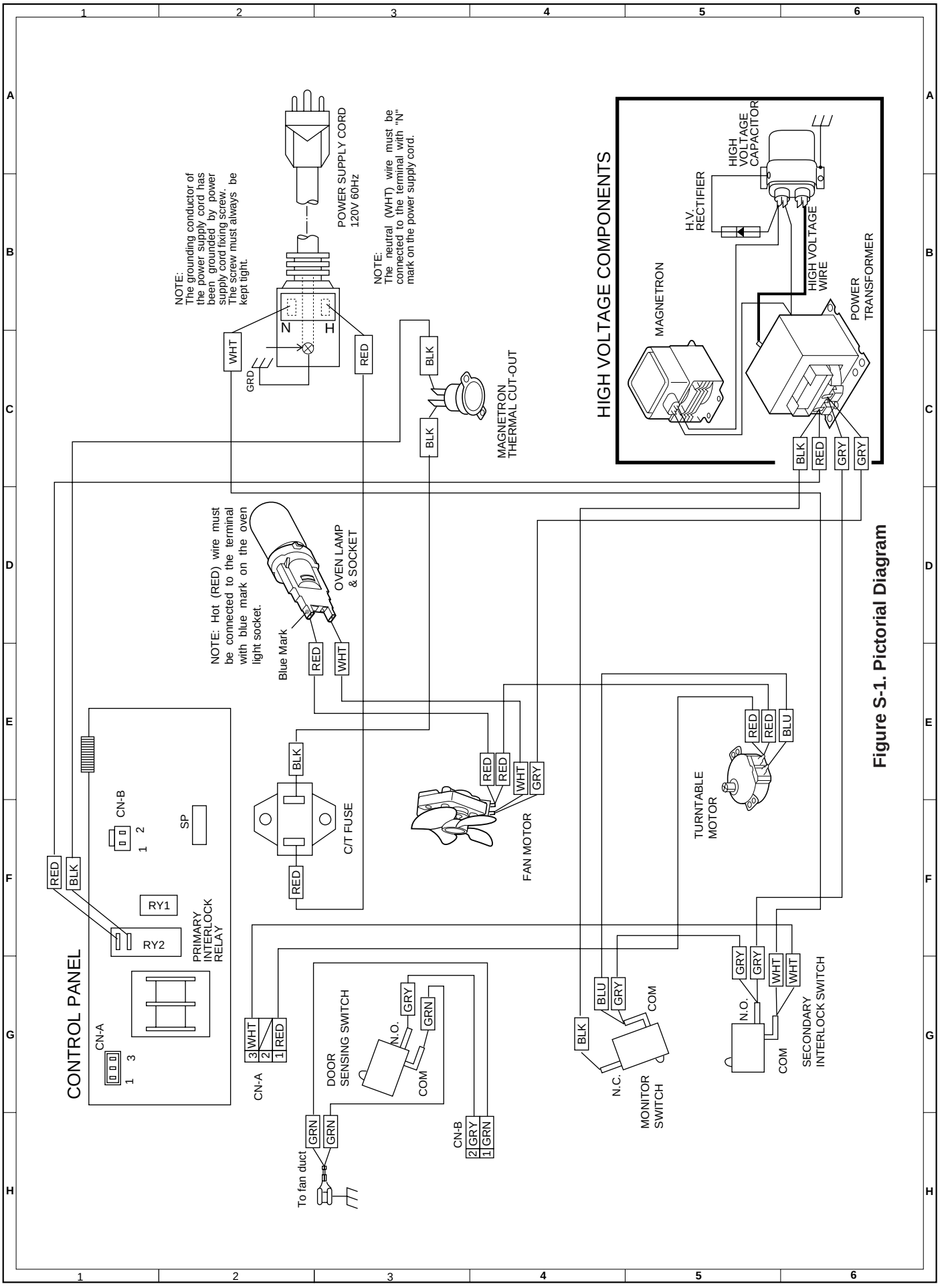


Figure S-1. Pictorial Diagram

PARTS LIST

Note: The parts marked "Δ" may cause undue microwave exposure.
The parts marked "*" are used in voltage more than 250V.

	REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
			ELECTRIC PARTS		
	1- 1	QSW-MA137WRE0	Secondary interlock switch & door sensing switch	2	AH
	1- 2	FFS-BA027WRKZ	C/T fuse (120˚C, 13A) & monitor switch (AM51620C53Y1) assembly	1	AS
	1- 3	FACCDA079WRE0	Power supply cord	1	AF
	1- 4	QSOCLA021WRE0	Oven lamp socket	1	AH
*	1- 5	FH-DZA095WRKZ	High voltage rectifier	1	AQ
*	1- 6	RC-QZA209WRE0	High voltage capacitor	1	AX
*	1- 7	RMOTEA383WRE0	Fan motor	1	AV
*Δ	1- 8	RV-MZA195WRE0	Magnetron	1	BK
*Δ	1- 8	RV-MZA198WRE0	Magnetron (Iinterchangeable)	1	BN
	1- 9	RLMPTA068WRE0	Oven lamp	1	AG
	1-10	RMOTDA211WRE0	Turntable motor	1	AS
	1-10	RMOTDA186WRE0	Turntable motor (Iinterchangeable)	1	AW
	1-11	RTHM-A117WRE0	Thermal cut-out 95˚C	1	AQ
*	1-12	RTRN-A606WRZZ	Power transformer	1	BM
			CABINET PARTS		
	2- 1	GCABUA779WRPZ	Outer case cabinet [R-120DSC]	1	BB
	2- 1	GCABUA781WRPZ	Outer case cabinet [R-120DG]	1	BB
	2- 1	GCABUA783WRPZ	Outer case cabinet [R-120DP]	1	BB
	2- 2	GDAI-A325WRWZ	Bottom plate	1	AF
	2- 3	GLEGPA074WRE0	Foot	2	AC
			CONTROL PANEL PARTS		
	3- 1	DPWBFC045WRUZ	Control unit	1	BB
	3- 2	FPNLCB485WRKZ	Panel frame with key unit	1	AY
	3- 2-1	HPNLCB607WRFZ	Control panel	1	AN
	3- 2-2	PSHEPA723WREZ	Key sheet	1	AM
	3- 3	PPACGA175WREZ	Packing	1	AF
			OVEN PARTS		
Δ	4- 1	PHOK-A117WRPZ	Latch hook	1	AH
	4- 2	PDUC-A740WRWZ	Air intake duct	1	AD
	4- 3	LBNDKA132WRP0	H.V. Capacitor holder	1	AD
	4- 4	PDUC-A736WRPZ	Magnetron air duct	1	AF
	4- 5	PDUC-A743WRPZ	Exhaust duct	1	AD
	4- 6	PCUSUA541WRPZ	Cushion	1	AC
	4- 7	PDUC-A745WRWZ	Fan duct	1	AE
	4- 8	NFANJA029WRE0	Fan blade	1	AL
	4- 9	PCUSUA540WRPZ	Cushion	1	AC
	4-10	PDUC-A752WRFZ	Top air separator	1	AD
Δ	4-11	**********	Oven cavity **(Not replaceable part)**	1	--
	4-12	PCOVPA359WREZ	Waveguide cover	1	AD
	4-13	GLEGPA078WRFZ	Leg (Left)	1	AE
	4-14	GLEGPA079WRFZ	Leg (Right)	1	AE
	4-15	PDUC-A746WRFZ	Air separator	1	AE
	4-16	PSKR-A367WRFZ	Barrier	1	AE
	4-17	PCUSGA541WRPZ	Cushion	2	AC
	4-18	PPACGA097WRE0	O-ring	1	AG
	4-19	PCUSUA542WRPZ	Cushion	1	AC
	4-20	PCUSGA543WRPZ	Cushion	1	AC
	4-21	PCUSUA543WRPZ	Cushion	1	AC
	4-22	PCUSUA544WRPZ	Cushion	1	AC
	4-23	LANGTA369WRPZ	Chassis support	1	AF
	4-24	PDUC-A753WRPZ	Air duct	1	AE
	4-25	LANGTA370WRPZ	Support angle	1	AD
	4-26	PCUSGA544WRPZ	Cushion	1	AE
	4-27	PCUSUA212WRP0	Cushion	1	AB
	4-28	PCUSUA545WRPZ	Cushion	1	AC
	4-29	PCUSUA546WRPZ	Cushion	1	AC
✸	4-30	PSPAKA006WREZ	Spacer	1	AE
✸	4-31	PCUSUA452WRP0	Cushion	1	AB
✸	4-32	PSPAKA008WREZ	Spacer	1	AC
✸	4-33	PSPAKA007WREZ	Spacer	1	AC
✸	4-34	LX-WZA053WREZ	Special washer	1	AC
✸	4-35	PSPAKA005WREZ	Spacer	1	AC
✸	4-36	PSPAKA004WREZ	Spacer	1	AC

✸ Rerer to "POSTION OF SPACERS" on page 9

	REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
			DOOR PARTS		
Δ	5- 1	FDORFA341WRTZ	Door panel	1	AX
	5- 2	GWAKPA743WRRZ	Door frame [R-120DSC]	1	AX
	5- 2	GWAKPA747WRRZ	Door frame [R-120DG]	1	AX
	5- 2	GWAKPA749WRRZ	Door frame [R-120DP]	1	AX
	5- 3	JBTN-B119WRFZ	START/MINUTE PLUS button and STOP/CLEAR button	2	AE
	5- 4	MSPRTA196WREZ	Button spring	2	AC
Δ	5- 5	LSTPPA194WRFZ	Latch head	1	AE
	5- 6	MSPRTA084WRE0	Latch spring	1	AB
	5- 7	PSHEPA722WREZ	Sealer film	1	AE
	5- 8	GCOVHA418WRFZ	Choke cover	1	AL
	5- 9	LSTPPA196WRFZ	Door stopper	1	AC
	5-10	XEPSE30P08XS0	Screw : 3mm x 8mm	4	AC
	5-11	PCUSUA555WRPZ	Cushion	1	AH
			MISCELLANEOUS		
	6- 1	FROLPA089WRK0	Turntable support	1	AP
	6- 2	NTNT-A060WRE0	Turntable	1	AP
	6- 3	TINSEA857WRRZ	Instruction book	1	AD
	6- 4	FW-VZB784WREZ	Switch harness	1	AF
	6- 5	FW-VZB773WREZ	Main wire harness	1	AR
*	6- 6	QW-QZA239WRZZ	High voltage wire	1	AH
	6- 7	TCAUAA166WRR0	DHHS caution label	1	AC
	6- 8	TCAUAA258WRRZ	Monitor caution	1	AC
	6- 9	TCAUAA240WRR0	Screw caution	1	AC
			SCREWS AND WASHERS		
	7- 1	XEPSD30P08KS0	Screw : 3mm x 8mm	6	AA
	7- 2	XOTSD40P08000	Screw : 4mm x 8mm	20	AA
	7- 3	LX-EZA042WRE0	Special screw	4	AB
	7- 4	LX-CZ0052WRE0	Special screw	2	AA
	7- 5	LX-CZA070WRE0	Special screw (Torx tamper proof screw)	2	AC
	7- 6	LX-WZA028WRE0	Special washer	1	AB
	7- 7	XHTSD40P12RV0	Screw : 4mm x 12mm	1	AA
	7- 8	XHPSD40P08K00	Screw : 4mm x 8mm	6	AA
	7- 9	XHPSD30P06000	Screw : 3mm x 6mm	2	AA
	7-10	XHTSD40P08RV0	Screw : 4mm x 8mm	6	AA
	7-11	XOTSD40P12RV0	Screw : 4mm x 12mm	4	AA
	7-12	XETSD40P08000	Screw : 4mm x 8mm	2	AA
	7-13	LX-CZA079WREZ	Special screw	1	AA

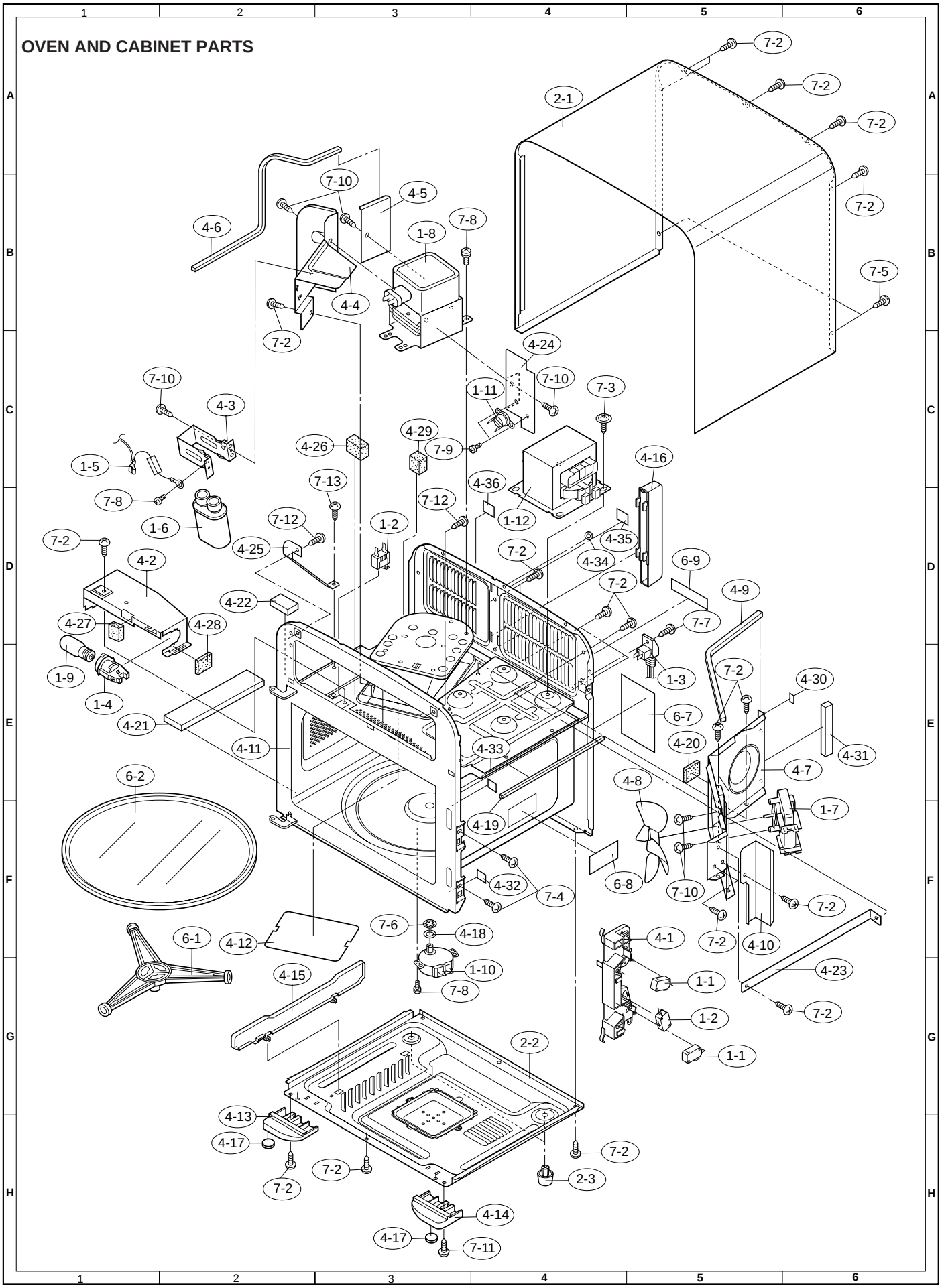
HOW TO ORDER REPLACEMENT PARTS

To have your order filled promptly and correctly, please furnish the following information.

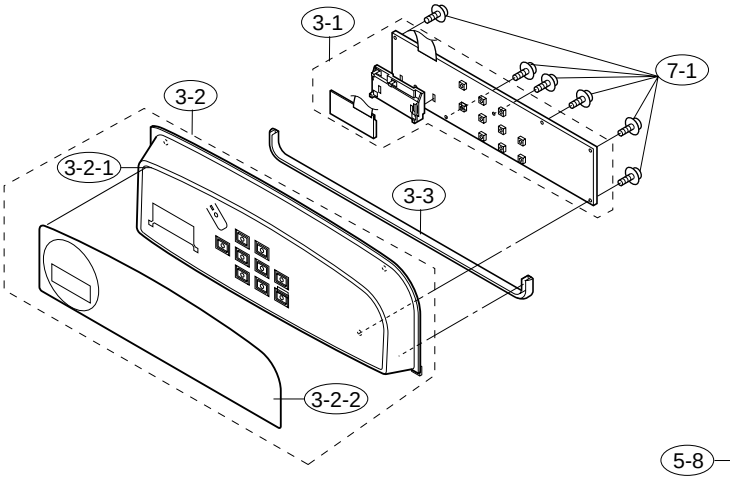
1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

Order Parts from the authorized SHARP parts Distributor for your area.
Defective parts requiring return should be returned as indicated in the Service Policy.

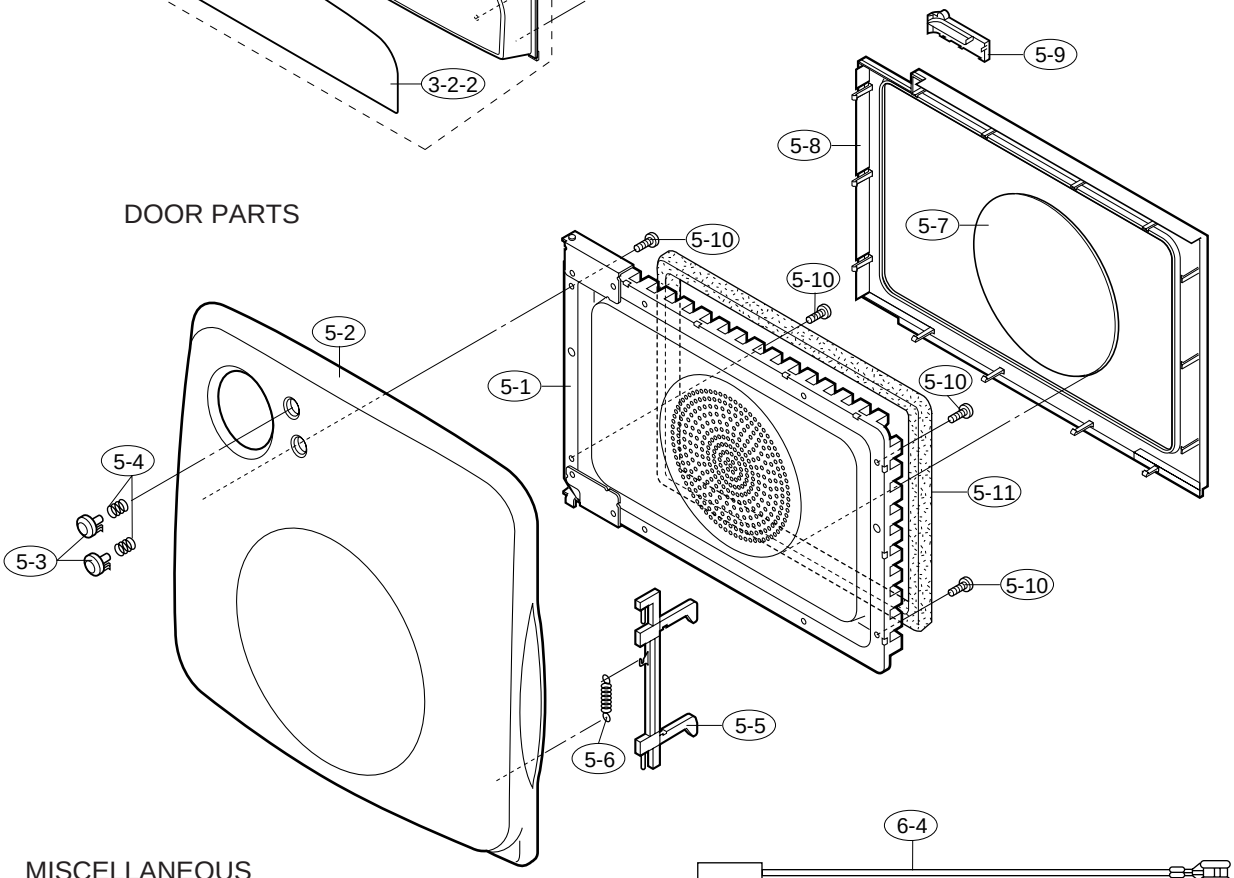
OVEN AND CABINET PARTS



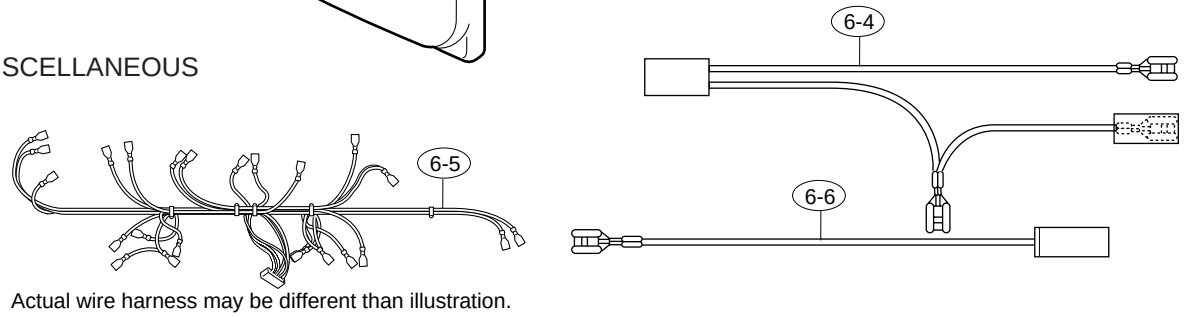
CONTROL PANEL PARTS



DOOR PARTS

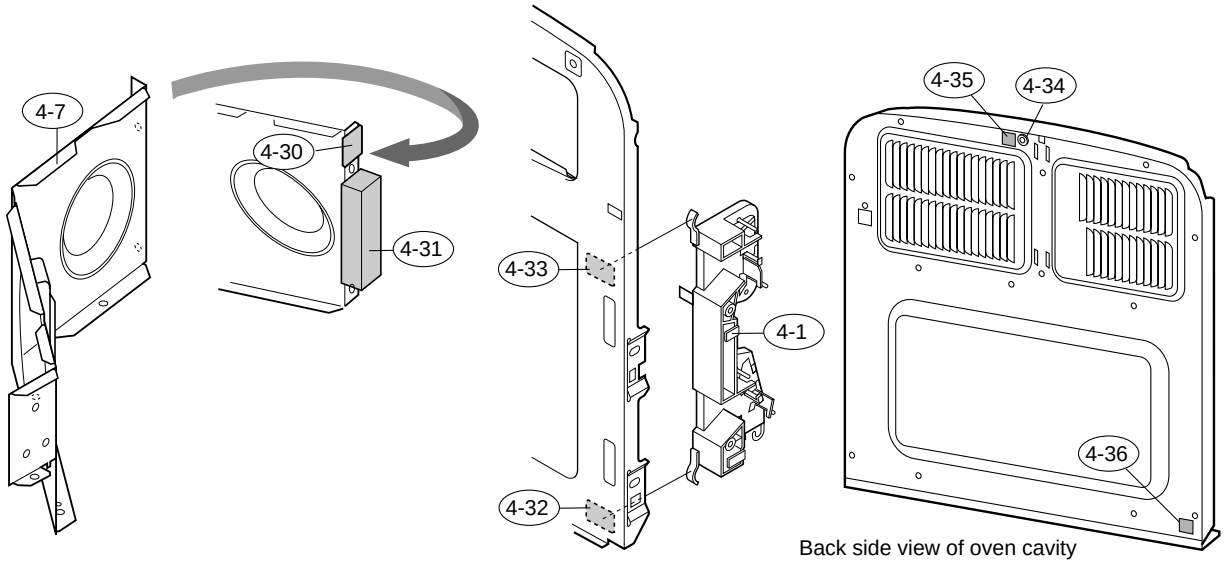


MISCELLANEOUS



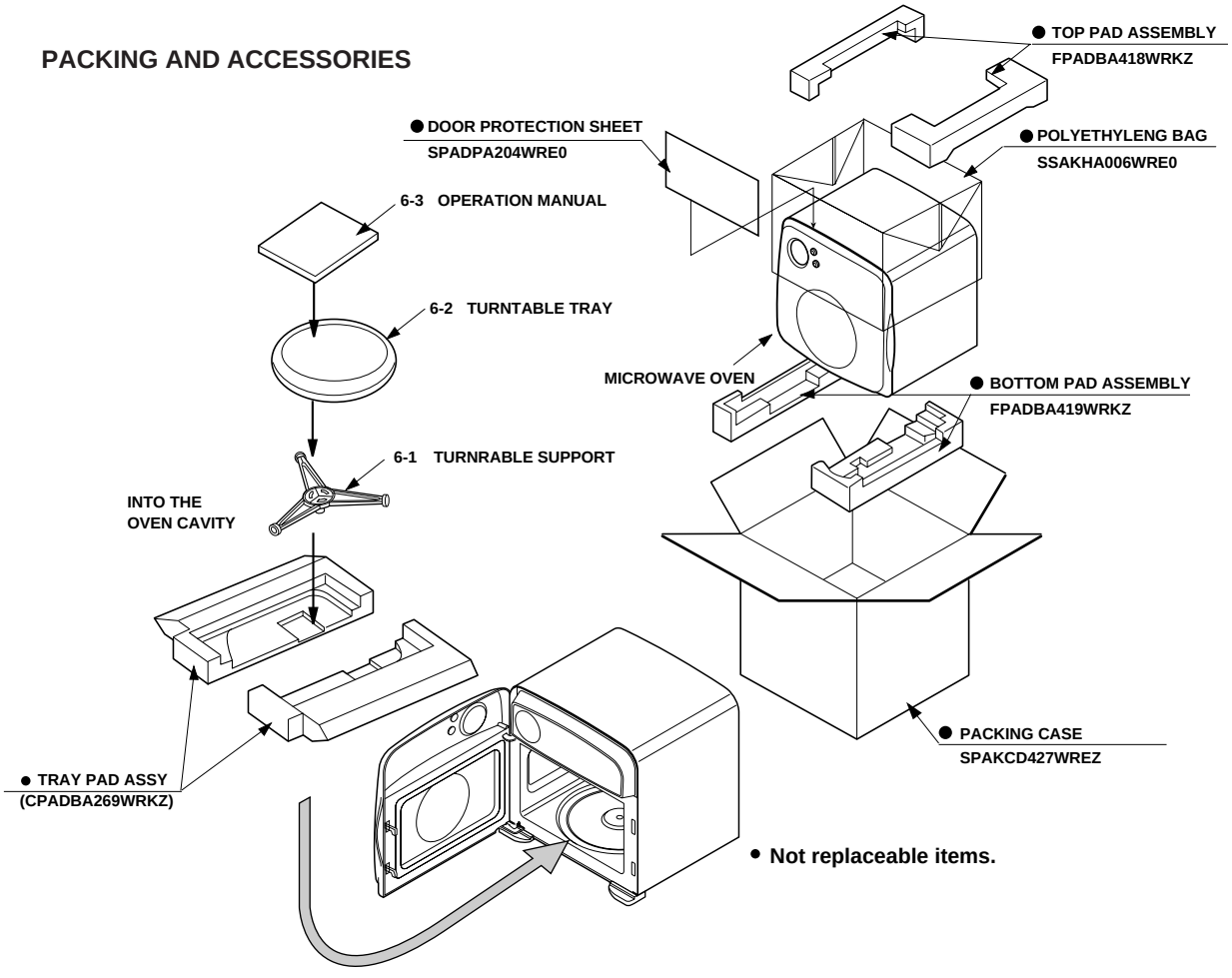
Actual wire harness may be different than illustration.

POSTION OF SPACERS



Back side view of oven cavity

PACKING AND ACCESSORIES



• **Not replaceable items.**

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